

Title (en)

Method for obtaining controller sidewall profile in print-patterned structures

Title (de)

Verfahren zum Erzielen eines kontrollierten Profils der Seitenwände in Druckmusterstrukturen

Title (fr)

Procédé pour obtenir un profil de paroi latérale contrôlé dans des structures à motif d'impression

Publication

EP 2062849 B1 20160127 (EN)

Application

EP 08169504 A 20081120

Priority

US 94345307 A 20071120

Abstract (en)

[origin: EP2062849A2] High aspect ratio structures can be obtained by print-patterning masking features in feature stacks such that each feature has a lateral edge which is aligned in a plane roughly perpendicular to the plane of the substrate on which the features are formed. Due to the differential lateral spreading between features formed on a substrate and formed atop other features, the print head is indexed less than the radius of a droplet to a position where a droplet ejected by the print head forms an upper feature atop a lower feature such that the lateral edges of the upper and lower features are aligned in the plane roughly perpendicular to the plane of the substrate. Feature stacks of two or more features may provide a vertical (or re-entrant) sidewall mask for formation of high aspect ratio structures, by e.g., electroplating, etc.

IPC 8 full level

B81C 1/00 (2006.01); **H05K 3/00** (2006.01)

CPC (source: EP US)

G03F 7/2018 (2013.01 - EP US); **H05K 3/0079** (2013.01 - EP US); **H05K 3/108** (2013.01 - EP US); **H05K 3/184** (2013.01 - EP US); **H05K 2203/013** (2013.01 - EP US); **H05K 2203/0577** (2013.01 - EP US); **H05K 2203/0588** (2013.01 - EP US)

Citation (examination)

EP 1937045 A1 20080625 - PALO ALTO RES CT INC [US]

Cited by

CN107856302A

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 2062849 A2 20090527; **EP 2062849 A3 20091111**; **EP 2062849 B1 20160127**; IL 195359 A0 20090803; IL 195359 A 20111031; JP 2009127129 A 20090611; JP 5374766 B2 20131225; US 2009130298 A1 20090521; US 8551556 B2 20131008

DOCDB simple family (application)

EP 08169504 A 20081120; IL 19535908 A 20081118; JP 2008290985 A 20081113; US 94345307 A 20071120